

MISSOURI
2014-2015
WATERFOWL HABITAT AND HUNTING SEASON REPORT
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2014-15 WATERFOWL SEASONS

Zone	Youth Hunt	Ducks	Canada Geese & Brant	White-fronted Geese	Light Geese (snow, blue, Ross's)*
NORTH	10/18-10/19	10/25-12/23	10/4-10/12 11/27-1/31	11/27-1/31	10/25-1/31
MIDDLE	10/25-10/26	11/1-12/30			
SOUTH	11/22-11/23	11/27-1/25			
*The Conservation Order for light geese will be in effect from February1-April 30 with no bag limit. Hunters may use electronic calls & unplugged shotguns, & shoot from ½ hour before sunrise to ½ hour after sunset. A Conservation Order Permit is the only permit required for residents & nonresidents during this time.					

Waterfowl hunting opportunity in Missouri began with the statewide teal (9/6-9/21), and Canada goose (10/4-10/12) seasons followed by the Youth Hunting weekends, the opening of the North, Middle, and South Zone duck seasons and late season goose hunting. Missouri duck seasons have been 60 days in length since 1997, with bag limits the same as allowed in the federal framework. Missouri typically offers youth waterfowl seasons the weekend before the regular duck season in each zone. The 2014 Missouri Canada goose season was 75 days in length with an early segment of nine days and a late segment, beginning on Thanksgiving Day, of 66 days. The daily bag limit was three birds during both the early and late segments.

Weather, Habitat, and Migration:

Spring and Summer Growing Conditions:

A brief synopsis of 2014 would be that it was not a normal year. Preliminary temperature data for 2014 indicates that it was the coolest in 35 years and the 9th coolest year on record. Wetland managers rated moist soil plant production as good to excellent on the majority of Missouri's publicly managed wetland areas.

Fall and Winter Habitat:

September started as unseasonably cool and wet, with 2-6 inches of rain falling early in the month, but ended warm and dry. October, usually a relatively dry month, was unusually wet. The first three weeks of October saw an accumulated average rainfall of 6 inches, twice the average. Portions of central and southwest Missouri received more than 10 inches of rain and experienced extensive flooding. October 2014 was the 5th wettest on record (1901-2014). It was similar to 2009 when the state received nearly 10 inches of rain.

November 2014 was the coldest since 1976 and the fifth coldest on record (1929-2014). The most dramatic event of the month occurred around Veterans Day (November 10th and 11th) when

an arctic blast ushered in cold temperatures and wintery precipitation across the Midwest. It produced the highest November snow accumulations in the U.S. compared to past 30 years. Daily temperatures were 10 to 25 degrees below normal for more than a week and these cold temperatures were accompanied by brisk northerly wind. Most shallow water habitats froze. North Missouri reported as much as three inches of ice and south Missouri reported up to an inch of ice in the wind-protected timber.

Surprisingly, the icy conditions thawed as December progressed. Temperatures ranged between 2-6 degrees above average, and were largely influenced by above normal minimum temperatures caused by overcast conditions. For example, in northwest Missouri maximum temperatures were 9-12 degrees above average with temperatures reaching the 50's during the day and remaining above freezing at night. A moderate cold front moved through Missouri December 17-18th and produced 5 inches of heavy, wet snow that fell just north of Kansas City to St. Joseph, MO, and eastward along Highway 36 into north central Missouri. The southwest side of the state received an inch of rain, while less than a half inch occurred elsewhere.

After a mild December, January 2015 temperatures were 7 degrees below normal. During the first two weeks of the month, average temperatures ranged from 2-15 degrees below freezing. This resulted in shallow water habitat re-freezing with ice > 2 inches in most locations. Exceptions were the few pockets kept open by congregations of ducks and geese and where flowing water on rivers and streams provided ice-free habitat for birds to loaf. In contrast, the last half of January was unseasonably warm with temperatures ranging 4-11 degrees F above normal and shallow water habitats beginning to thaw back out.

Waterfowl Migrations:

Blue-winged teal typically move through Missouri in September; however, this year teal numbers in September were spotty at best with the bulk of the birds apparently migrating through the state during the first part of October. Arrival of early season migrants in 2014 was later than the 5-year average as reflected in lower than average abundance during the last half of October and the first week of November. Through the last week of October, almost 80 percent of the waterfowl reported were early season dabblers including pintail (40 percent), green-winged teal (19 percent), and blue-winged teal (19 percent). Mallards accounted for only 6 percent of the surveyed ducks.

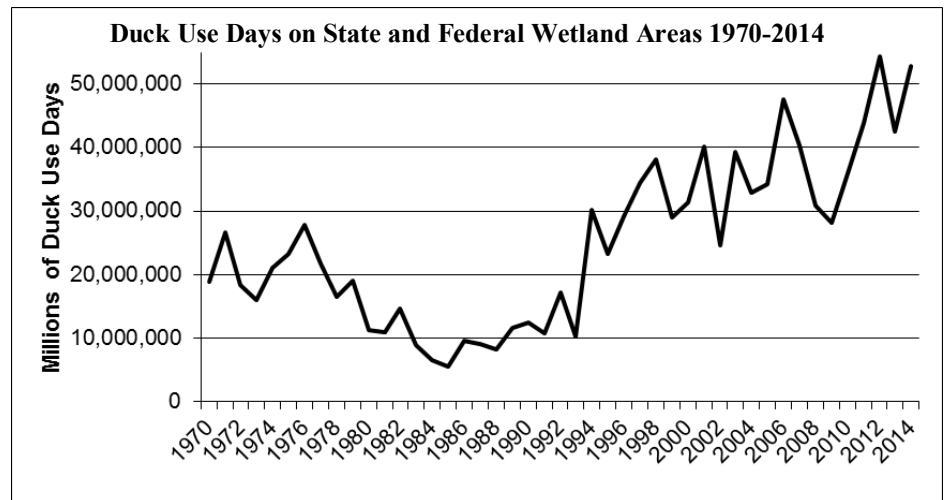
A cold front that brought the first hard freeze to Missouri on October 31st contributed to a slight influx of birds including divers, pintail, green-winged teal, white-fronted geese and the beginning arrival of a few mallards. A slow, wet, cold front that moved across the state on November 4th spurred a migration of white-fronts, ring-necks, gadwall, and shovelers.

The most significant and last migration event of the season occurred around Veteran's Day. Some areas reported an immediate influx of waterfowl, while others noted a steady buildup of birds through the week. Between the 1st and 3rd weeks of November all areas picked up new birds with the total number of ducks, statewide, tripling from 270,859 to 816,950 ducks. The percentage of mallards rose from 20 to 59 percent of the surveyed ducks, while many of the other, early season migrants departed. By Thanksgiving, Missouri held 1,022,362 ducks with 76 percent of them being mallards. Duck numbers remained relatively stable between 860,000 and 1,098,566 during the month of December. Canada goose numbers also remained essentially unchanged during

December. The presence and number of snow geese and white-fronted geese were variable and fluctuated through the month.

During the first half of January waterfowl numbers plummeted on many of the publicly managed wetland areas when shallow water habitat froze. As habitats thawed out during the latter half of the month duck numbers began to increase as mallards and other dabblers showed back up on the publicly managed wetlands. Snow geese and white-fronted geese also appeared to follow the frost line north during this time.

The 2014/15 total of 53.84 million duck use days is second only to 2012 and well above the long-term average. This high number was the result of ducks arriving around Veteran's Day and remaining for much of the season. Duck use days typically peak in the North Zone at the end of November and bird numbers decrease through December. This year, however, bird use on Department managed wetland areas in the North Zone first peaked between the second and third week of November. Although the peak duck use at this point was slightly below average, after waterfowl numbers took a slight dip, they rebounded and increased through December. This is very atypical. The Middle Zone duck use was also greater than the 5-year average. From the third week of November through the first of January the weekly duck use day totals for the Middle Zone exceeded the 5 year average. The timing and abundance of ducks in the South Zone was similar to the 5-year average. Essentially, after a slow start to the season, the Veteran's Day migration event ushered early migrants to and through the state and brought many of the mallards that appeared to stay through the end of December.



Duck and Goose Harvest:

Hunter effort and harvest at Missouri Department of Conservation managed wetland areas provide early indications of hunting results before statewide statistics are available in July. Hunters on MDC areas harvest only about 12% - 19% of the statewide total number of ducks. During dry years, MDC areas with water pumping capabilities typically account for a higher proportion of the statewide duck harvest than during wet years. If this year's harvest of 89,216 ducks on MDC areas represents 12%-19% of the statewide harvest, the harvest could range from 469,558 to 743,467 ducks. This estimate would fall within the range experienced during past 60-day seasons (378,100-769,868).

The 2014 season was markedly different than the 2013 season. Preliminary estimates indicate that in 2014 hunters took 46,362 trips to MDC intensively managed areas and harvested 89,216

ducks compared to harvesting 82,699 ducks in 35,453 trips in 2013. The daily ducks per hunter average declined from 2.31 to 1.92 ducks, one of the lowest daily averages in recent years.

The differences in harvest and hunter effort between 2013 and 2014 reflect differences in migration phenology and hunting conditions between the two seasons. The 2013 season was characterized by excellent hunting in November followed by an early freeze up. In 2014, ice was not as much of an issue; however, hunters reported that hunting became increasingly difficult as the season progressed due to the lack of new birds. Many hunters described this season as one of the worst in recent memory despite the presence of ample numbers of ducks during much of the season,

Canada Goose Harvest: The first migrant Canada geese arrived with the cold front around Veterans Day, but significant numbers did not show up until much later. The statewide count of 131,762 Canada geese during the 2014 Midwinter survey was down from 212,052 in 2013, but the estimate was similar to the previous 10-year average of 159,840 Canada geese. Due to relatively mild conditions, we expect that Canada goose harvest in 2014-2015 will be lower than 2013-2014.

White-fronted Goose Harvest: The number of white-fronted geese present in Missouri continues to grow. Small flocks are now observed periodically during fall and winter throughout the state. The greatest numbers are found in southeast Missouri. Harvest is expected to be similar to recent years.

Light Goose Harvest: The total light goose harvest in Missouri increased from an average of 16,535 during the 10 years prior to the Conservation Order (CO) (1988-1997 regular season) to an average annual harvest since 1998 of nearly 160,000 (regular season plus CO), a 10-fold increase. The estimated statewide harvest of light geese for 2013-14 was 72,852 during the regular season and 248,896 during the Conservation Order. The first major spring migrations of snow geese during 2015 occurred during the weekend of February 6-8. The return of cold weather has again slowed the movement of light geese into Missouri.

Waterfowl Disease Surveillance: An outbreak of avian cholera occurred in southeast Missouri during January 2015. Die-offs were first detected on January 15, 2015 at Otter Slough Conservation Area with approximately 100 birds (primarily snow geese) affected. Additional snow goose mortalities were reported in the following counties: Scott (12), Stoddard (12-45), and Pemiscot (~12); it is likely some degree of snow goose mortalities occurred throughout the Bootheel. The bacteria that cause avian cholera were confirmed with diagnostic testing for the die-off from Otter Slough CA. The outbreak likely continued until the birds dispersed along their migratory routes. Information regarding the die-off was reported to the National Wildlife Health Center in Madison, WI.